

**ABSTRACT OF THE DISCLOSURE**

A system for bi-directional data content transfer between a plurality of mobile platforms, such as aircraft or cruise ships, and a ground-based control segment. The system includes the ground-based control segment, a space segment and a mobile system disposed on each mobile platform. The ground-based control segment includes an antenna which is used to transmit encoded RF signals representative of data content to the space segment. The space segment includes a plurality of satellite transponders, with one of the transponders being designated by the ground-based control segment to transpond the encoded RF signals to the mobile system. The mobile system includes steerable receive and transmit antennas. The receive antenna receives the encoded RF signals from the satellite transponder, which are thereafter decoded, demodulated, D/A converted by a communications subsystem and transmitted to a server. The server filters off that data content not requested by any occupants on the mobile system. A local area network (LAN) receives the remaining data content and provides same to individual users on the mobile platform in accordance with previously submitted programming requests or data input by the users at access stations associated independently with each user.

The transmit antenna is used to transmit data content from laptop computers, PDAs or other user electronic devices coupled to the access stations back to the designated satellite transponder. The satellite transponder then transponds the data back to the antenna of the ground-based control segment.